



**STATE OF MONTANA
MONTANA DEPARTMENT OF TRANSPORTATION
JOB PROFILE**

☒
☐

Update
Formal Review

Date Submitted _____

SECTION I - Identification

Working Title: Transportation Modeler

Department: Transportation

Job Code Number: 193535

Division & Bureau: Rail, Transit, &
Planning – Planning & Policy Analysis
Bureau

Job Code Title: Transportation Planner

Section & Unit:

Pay Band: 5

Work Address: 2690 Prospect Ave
Helena, MT 59602

Position Number: 05012, 13012, 13016, 36118, 36114

Phone: 406-444-9233

☐ FLSA Exempt ☒ FLSA Non-Exempt

☐ Non-Union ☒ MPEA ☐ Blue Collar

Profile Completed By:

Lynn Zanto
Chris Dorrington
Carol Strizich

Work Phone:

444-3445
444-7239
444-9240

Work Unit Mission Statement or Functional Description:

The Montana Department of Transportation's (MDT) mission is to serve the public by establishing a transportation system and services that emphasize quality, safety, cost effectiveness, economic vitality and sensitivity to the environment.

The Rail, Transit and Planning Division provides a broad range of multimodal planning, program, and data collection and analysis functions that support MDT's efforts to plan for and manage Montana's multimodal transportation system. These activities help officials select projects and provide information for short- and long-range construction and grant programs. The division includes the Data & Statistics Bureau; the Multimodal Planning Bureau; the Environmental Services Bureau; the Policy, Program & Performance Analysis Bureau; and the Grants Bureau.

The Multimodal Planning Bureau develops and implements the programs, processes, systems and planning products necessary to make informed policy and programming decisions in cooperation with

the public, representatives of stakeholder groups, and local, tribal, federal, and state elected and appointed officials. Bureau responsibilities include state rail, highway and urban planning and program administration; the statewide multimodal transportation planning process; air quality; tourism, economic development, trade corridor, and freight planning and programs; transportation demand management programs; and the development of special studies and research products such as reports requested by the legislature.

The Statewide and Urban Planning Section supports and conducts transportation planning in Montana's urban and rural areas. The section ensures that transportation planning and construction programs are consistent with legal requirements, federal guidelines and state law pertaining to transportation plans, programs and projects in these areas. The section administers and supports the use of federal and state construction funds allocated to three large and twelve small urban areas. The section is also responsible for statewide multimodal transportation planning; tourism, economic development, trade corridor and freight planning and programs; urban traffic forecast modeling; and the analysis of economic impacts of proposed highway projects and corridor improvements.

The Rail, Air Quality and Studies Section has the responsibility for managing Congestion Mitigation Air Quality (CMAQ) funded programs, including the Montana Air Congestion Improvement (MACI) program; coordinating division activities related to National Ambient Air Quality Standards (NAAQS) issues, including planning and programming conformity for PM10, CO and PM2.5; managing rail planning activities; administering the Montana Essential Freight Rail Loan (MEFRL) program, providing administrative and technical support for the Rail Service Competition Council (RSCC); coordinating MDT's economic analysis and liaison activities; assisting in the development and implementation of the division's public involvement processes; tracking and reporting on legislative and other hearings of interest; managing public stakeholder surveys for MDT's long range plan (TranPlan 21); and managing the department's federal discretionary grant programs and other multimodal program activities.

Describe the Job's Overall Purpose:

Economist Modeler emphasis

This emphasis area is responsible for assisting in the planning functions of the Rail, Air Quality, and Studies section. This includes performing routine economic modeling, assembling data needed for economic models, and drafting initial reports. Other duties include assisting with program management of planning processes such as applying for and administering grants and legislatively directed funds. Another responsibility is assisting with division publications. These positions report to the Rail, Air Quality and Studies supervisor and do not directly supervise other agency personnel.

Transportation Demand Modeler emphasis

This emphasis area is responsible for assisting in the planning functions of the Statewide and Urban Planning section. This includes assisting in developing data for transportation modeling, and assisting in developing methodologies for forecasting future travel demand models in urban areas. Other responsibilities include maintaining databases for the purposes of developing travel demand models, and assisting in providing travel demand and planning activities to local governments. These positions report to the Statewide and Urban Planning supervisor and do not directly supervise other agency personnel.

SECTION II - Major Duties or Responsibilities	% of Time
--	------------------

Planner II – Band 5 Level 1

A. <u>RESEARCH ANALYSIS AND MODELING</u>	50%
---	------------

1. Assembles and compiles data from a number of resources and performs various analyses. Manages data inputs for components of economic or travel demand model programs, and assists with data collection for special projects. Examples include being responsible for collecting, formatting and reporting on data elements relating to pre-NEPA corridor studies, planning and transportation studies, and land use data for travel demand modeling.
2. Collects targeted specific data sets. Provides quality control through analysis and review of data from initial collection to final report preparation. Data sets include economic projections, freight, air quality, demographics, socio-economic, traffic, rail and other multimodal datasets for the purposes of economic and travel demand modeling. Manages the data collected, understands transportation planning concepts, and provides technical support.
3. Accesses traffic, roadway, and GIS data from numerous MDT sources. Participates in quality control activities to ensure the data meets the needs of the section as well as the Rail, Transit, and Planning Division.
4. Reviews draft documents for accuracy and ensures data is presented in a clear and concise manner for public review. Assists in development of transportation plans such as community safety plans, corridor studies and other transportation plans. Develops web sites for public communication.
5. Performs ongoing process or project tracking for transportation studies such as corridor studies, safety audits and planning studies. Tracks the engineering projects implemented as a result of recommendations from these studies.
6. Assists in managing low risk planning projects and processes. This includes creating and reviewing grant applications, researching federal and state policies and regulations, and maintaining a database of federal earmarks.
7. Develops draft contract amendments for review. These include agreements with private, local and county entities

B. TRANSPORTATION PLANNING SERVICES 40%

1. Coordinates surveys with internal and external stakeholders, maintains survey elements, and coordinates meetings with supervisor and bureau chief on content, selection and delivery.
2. Coordinates with external stake holders regarding grants, special projects and plans conducted within the bureau and section.
3. Provides additional assistance with transportation activities as directed by the section supervisor.
4. Provides technical support for committee meetings and external meetings.
5. Initiates external communications in support of activities, studies, and grants monitored in the section.

C. OTHER DUTIES 10%

Performs technical, administrative and other work as assigned by direct supervisor and/or Division Administrator.

Planner III Band 5 Level 2

To be eligible for Planner III, the employee/applicant must be proficient, fully functional and demonstrate the ability to perform all Planner II duties and responsibilities described in this job profile.

A. Transportation Planning Services

50%

1. Assesses corridor requests for applicability to and compliance with state and federal statutes. Oversees data analysis for past transportation planning studies such as corridor studies, transportation and safety plans, and assists with data collection for new studies.
2. Responsible for planning, developing, documenting managing and updating the data, processes and procedures necessary to perform corridor study analysis, and other transportation studies.
3. Conducts quality control and reasonableness checks of data. Develops and prepares annual report of projects conducted as a result of an MDT initiated transportation planning study. This will include project data such as costs, locations, study scopes, and GIS representations.
4. Manages reoccurring planning processes or cycles (grant applications). This could include regularly reviewing opportunities for grants such as Transportation Investment Generating Economic Recovery (TIGER) grants, Economic Development Administration (EDA) disaster grants, and other discretionary grants, or reviewing needs of communities for transportation modeling. This includes working with internal and external stakeholders, preparing grant applications, and reviewing and providing additional information as requested.
5. Develops original documents for signature: These include Memorandum Of Understandings (MOAs), Memorandums Of Agreements (MOAs), contracts for grants and planning studies, or other documents as needed.
6. Manages low risk planning projects and transportation studies.

B. Research Analysis and Modeling

40%

1. Develops research and processes. Acts as lead in research projects, which includes using appropriate research methods, developing literature reviews, conducting research, writing and editing .
2. Maintains datasets for web based Geographic Information System (GIS) layers for the section. Works with the data and statistics bureau to develop the layers, and to ensure the data is accessible for transportation planning projects and other needs of the section and the bureau.
3. Participates in reviews of research materials, including research projects for the division, economics, rail, air quality, travel demand modeling, and special studies assigned by the section supervisor.
4. Provides additional assistance with rail, air quality and studies activities as directed by the section supervisor.

C. Other Duties As Assigned

10%

Performs technical, administrative and other work as assigned by direct supervisor and/or division administrator.

The following duties and/or specific tasks listed under section II above are considered “essential functions” because they require specialized expertise and skill and are the primary reasons the job exists (they must be performed by this position with or without accommodations):

The following duties are considered essential functions because they require specialized expertise and skill and are the primary reasons the job exists:

Duty A: Research Analysis and Modeling
Duty B: Transportation Planning Services

The following mental and physical demands are associated with these essential functions:

PHYSICAL

- Light lifting (less than 10 lbs.)
- Carry light items (papers, books, small parts)
- Remaining seated for extended periods of time, with occasional walking; standing; bending
- Occasional travel within the state and out of state travel by airline to national conferences and meetings
- Operating a personal computer
- Communicate in writing, in person and over the phone

MENTAL

- Mediating conflicts between irate and often hostile parties.
- Ability to multi-task
- Demands for accuracy in all aspects of work
- Ability to meet inflexible deadlines
- Complex mathematics including statistical analysis
- Comparing data
- Compiling information, analyzing, coordinating, negotiating, instructing

Does this position supervise others? ☐ Yes ☒ No

SECTION III - Minimum Qualifications - List minimum requirements for the first day of work.

Critical knowledge and skills required for this position:

KNOWLEDGE: The position requires knowledge of the theories, principles, methods, and techniques of transportation planning, associated mathematical and statistical analysis, and computer sciences. This position requires knowledge of research methods, project management and data management techniques.

SKILLS:

Skill in written and verbal communication, research, analysis, public involvement strategies, and computer software applications used for data management and analysis, word processing, spreadsheets, publications, GIS/mapping and presentations.

Behaviors required to perform these duties:

See MDT Core Behaviors
Form Revision Date: 12-2008

Education:

Check the one box indicating minimum education requirements for this position for a new employee the first day of work:

- | | |
|---|--|
| <input type="checkbox"/> No education required | <input type="checkbox"/> Related AAS/2-years college/vocational training |
| <input type="checkbox"/> High school diploma or equivalent | <input checked="" type="checkbox"/> Related Bachelor's Degree |
| <input type="checkbox"/> 1-year related college/voc. training | <input type="checkbox"/> Related Master's degree |

Please specify the acceptable fields of study:

Preferred: BA/BS in Economics, Transportation Planning, Statistics, or Mathematics.

Acceptable: BA/BS in the following areas: Computer Science, Computer Information Systems, Project Management, Business, Public Administration, Finance, Accounting, Engineering, or Resource Management.

Experience:

Check the one box indicating minimum work-related experience requirements for this position for a new employee the first day of work:

- | | |
|--|--|
| <input checked="" type="checkbox"/> No prior experience required | <input type="checkbox"/> 3 years |
| <input type="checkbox"/> 1 year | <input type="checkbox"/> 4 years |
| <input type="checkbox"/> 2 years | <input type="checkbox"/> 5 or more years |

Other specific experience:

Preferred is one (1) year of work-related experience

Alternative Qualifications:

This agency will accept alternative methods of obtaining necessary qualifications.

☒ Yes ☐ No

Alternative qualifications include:

Other combinations of education and related experience may be considered.

SECTION IV – Other Important Job Information

- | | |
|--|--|
| <input type="checkbox"/> Fingerprint check | <input checked="" type="checkbox"/> Valid driver's license |
| <input type="checkbox"/> Background check | <input type="checkbox"/> Other; Describe |

Other information including working conditions such as shifts, lifting requirements, travel or hours.

SECTION V – Signatures

Signature indicates this statement is accurate and complete.

Employee:

Name: _____ Title: _____

Signature: _____ Date: _____

Immediate Supervisor:

Name: _____ Title: _____

Signature: _____ Date: _____

Bureau Chief:

Name: _____ Title: _____

Signature: _____ Date: _____

Division/District Administrator:

Name: _____ Title: _____

Signature: _____ Date: _____

Department Designee:

Brent Rabe/Designee

Human Resources Officer
Human Resources Division

Signature: _____ Date: _____



**STATE OF MONTANA
MONTANA DEPARTMENT OF TRANSPORTATION
JOB PROFILE**

☒ Update
☐ Formal Review

Date Submitted _____

SECTION I - Identification

Working Title: Transportation Modeler

Department: Transportation

Job Code Number: 193536

**Division & Bureau: Rail, Transit, &
Planning – Planning & Policy Analysis
Bureau**

Job Code Title: Transportation Planner

Section & Unit:

Pay Band: 6

**Work Address: 2690 Prospect Ave
Helena, MT 59602**

Position Number: 05012, 13012, 13016, 36118, 36114

Phone: 406-444-9233

☐ FLSA Exempt ☒ FLSA Non-Exempt

☐ Non-Union ☒ MPEA ☐ Blue Collar

Profile Completed By:

Lynn Zanto
Chris Dorrington
Carol Strizich

Work Phone:

444-3445
444-7239
444-9240

Work Unit Mission Statement or Functional Description:

The Montana Department of Transportation's (MDT) mission is to serve the public by establishing a transportation system and services that emphasize quality, safety, cost effectiveness, economic vitality and sensitivity to the environment.

The Rail, Transit and Planning Division provides a broad range of multimodal planning, program, and data collection and analysis functions that support MDT's efforts to plan for and manage Montana's multimodal transportation system. These activities help officials select projects and provide information for short- and long-range construction and grant programs. The division includes the Data & Statistics Bureau; the Multimodal Planning Bureau; the Environmental Services Bureau; the Policy, Program & Performance Analysis Bureau; and the Grants Bureau.

The Multimodal Planning Bureau develops and implements the programs, processes, systems and planning products necessary to make informed policy and programming decisions in cooperation with

the public, representatives of stakeholder groups, and local, tribal, federal, and state elected and appointed officials. Bureau responsibilities include state rail, highway and urban planning and program administration; the statewide multimodal transportation planning process; air quality; tourism, economic development, trade corridor, and freight planning and programs; transportation demand management programs; and the development of special studies and research products such as reports requested by the legislature.

The Statewide and Urban Planning Section supports and conducts transportation planning in Montana's urban and rural areas. The section ensures that transportation planning and construction programs are consistent with legal requirements, federal guidelines and state law pertaining to transportation plans, programs and projects in these areas. The section administers and supports the use of federal and state construction funds allocated to three large and twelve small urban areas. The section is also responsible for statewide multimodal transportation planning; tourism, economic development, trade corridor and freight planning and programs; urban traffic forecast modeling; and the analysis of economic impacts of proposed highway projects and corridor improvements.

The Rail, Air Quality and Studies Section has the responsibility for managing Congestion Mitigation Air Quality (CMAQ) funded programs, including the Montana Air Congestion Improvement (MACI) program; coordinating division activities related to National Ambient Air Quality Standards (NAAQS) issues, including planning and programming conformity for PM10, CO and PM2.5; managing rail planning activities; administering the Montana Essential Freight Rail Loan (MEFRL) program, providing administrative and technical support for the Rail Service Competition Council (RSCC); coordinating MDT's economic analysis and liaison activities; assisting in the development and implementation of the division's public involvement processes; tracking and reporting on legislative and other hearings of interest; managing public stakeholder surveys for MDT's long range plan (TranPlan 21); and managing the department's federal discretionary grant programs and other multimodal program activities.

Describe the Job's Overall Purpose:

Economist Modeler emphasis

This emphasis area is responsible for assisting in the planning functions of the Rail Air Quality and Studies section. Incumbents develop methods and procedures to analyze and forecast transportation economic impacts; develop and implement traffic models to evaluate the impacts of alternative transportation projects on economic conditions; develop and model hypothetical scenarios to analyze impacts on various transportation networks from land use changes and network modifications; conduct and coordinate transportation planning studies in response to needs and priorities of the division, and evaluates these studies based on adequacy of technical aspects, methodology, and forecasting techniques; utilize economic programs in support of the P3 programming process; and critically review and evaluate MDT planning activities to ensure consistency with federal and state requirements. Incumbents also monitor and evaluate major MDT National Environmental Policy Act (NEPA) and pre-NEPA projects to ensure that transportation planning considerations are incorporated in project planning; participate in state and local efforts for freight analysis; support TranPlan 21 implementation, coordinate with Montana Department of Commerce's state and regional economic development personnel; and develop and draft funding agreements, requests for proposals, scopes of work, and contracts for studies that require consultant services. These positions will report to the Rail, Air Quality and Studies supervisor.

Transportation Demand Modeler emphasis

This emphasis area is responsible for assisting in the planning functions of the Statewide Urban and Planning section. Incumbents develop methodologies and implement procedures to forecast future travel in urban areas; design, document, and implement area-wide traffic models used to evaluate the effectiveness of alternative transportation; research, analyze and apply new methodologies to implement comprehensive and complete transportation planning studies; provide expert guidance and

assistance to local government planning agencies in the development and implementation of local comprehensive transportation plans; analyze plans and programs in relation to federal air quality conformity regulations to determine need for regional analysis; research federal and state regulations as they pertain to the urban transportation program; and represents and speaks for the department at Technical Advisory Committee, Policy Coordinating Committee, Transportation Coordinating Committee or other inter and intra agency meetings. These positions will report to the Statewide Urban and Planning supervisor.

SECTION II - Major Duties or Responsibilities	% of Time
--	------------------

Planner IV – Band 6 Level 1

A. RESEARCH ANALYSIS AND MODELING	50%
--	------------

1. Researches and analyzes travel patterns and/or economic circumstances to establish baseline data for the development of transportation and economic forecasts. Analyzes and evaluates data to determine relevant factors affecting the interrelationships between transportation planning and economic development, with oversight from planner V.
2. Requests, receives, and analyzes data and communicates the analyses to supervisor or lead planner. This includes developing methods and procedures to analyze and forecast transportation and economic impacts of changes to land use development, urban street network, vehicular congestion, air quality and other influences. The incumbent will evaluate the nature and availability of baseline data; research objectives and parameters; and relative project priorities to determine the most appropriate methodologies (e.g., trend analyses of existing traffic patterns, computer-aided modeling techniques, etc.).
3. Develops and implements computer models to evaluate the impacts of alternative transportation projects on economic conditions, vehicular congestion, air quality, and other factors. This involves research and analysis of existing and future land use types, street networks, and traffic flow patterns; translation of GIS data structures into planning models; and evaluation of information to determine optimum methods for integrating data sets into a model that provides meaningful and defensible results.
4. Creates technical documentation and reports regarding development of each economic model to assure that professional assumptions and judgment are used to develop each model and forecasting methodology.
5. Regularly reviews, tests and evaluates the effectiveness of models to ensure consistency with known traffic patterns and volumes and or economic factors. Identifies and resolves errors and deficiencies associated with baseline information, data relationships, and/or technical system functions to ensure the integrity of results.
6. Configures system functions and operations according to specific project needs and applications. Ensures compatibility with existing systems, business processes, and user requirements.
7. Coordinates with bureau staff and technical specialists to ensure effective system development, implementation, and performance monitoring. Ensures system operations conform to state and department information systems standards and requirements.
8. Researches and recommends guidance and processes for transportation and/or economic programs.
9. Researches and monitors legislation and regulations at the federal and state level to identify funding sources related to transportation development. Evaluates eligibility guidelines, funding mechanisms, reporting requirements, and other factors to

recommend funding opportunities. Develops position papers, reports, studies, special reports requested by the Legislature, and other presentations in support of transportation planning efforts.

10. Analyzes various project and program scenarios utilizing the HEAT tool in support of the P3 Programming Process to ensure that economic impacts are analyzed within context of all needs and fiscal constraints and are consistent with the policy objectives of TranPlan 21.

B. TRANSPORTATION PLANNING SERVICES 40%

1. Serves as a technical resource and MDT representative for various planning committees. Researches federal statutes, regulations and legislative proposals as they pertain to the state's multimodal programs. For studies which require consultant services, prepare and/or review documents including requests for proposals, scopes of work, and contracts, and actively manage the contract. Negotiate terms and amendments for contracts if needed.
2. Develops, coordinates and provides input for contracts draft funding agreements, memorandums of understanding (MOUs) and contracts with local governments to define roles, responsibilities and funding commitments for development of transportation plans, special transportation studies and research projects. Research and recommend guidance processes for various grants and programs, and monitor activities. Write and implement and memorandums of agreements (MOAs).
3. Prepares materials for committee meetings to support agenda items related to the urban programs, rail programs, the CMAQ program and other transportation projects and programs, for the division and local governments.
4. At the request of the supervisor, the incumbent conducts and coordinates transportation planning studies in response to needs and priorities of the division, metropolitan planning organizations, local and state planning personnel, and others entities. This involves researching, analyzing, and applying new methodologies for specific studies; conducting and coordinating data source identification, compilation, and analysis; and developing and presenting reports of findings and recommendations.
5. Responsible for overseeing and managing common planning processes for urban and rural planning, or for a program such as CMAQ or the Rail Service Competition Council (RSCC).

C. OTHER DUTIES 10%

Performs technical, administrative and other work as assigned by direct supervisor and/or Division Administrator

Planner V Band 6 Level 2

To be eligible for Planner V, the employee/applicant must be proficient, fully functional and demonstrate the ability to perform all Planner IV duties and responsibilities described in this job profile.

A. Transportation Planning Services 50%

1. Independently oversees, manages and coordinates and major transportation planning services throughout the state. This involves assessing needs and objectives of local planning officials, district personnel, and MDT staff; researching and developing strategies to meet the needs of stakeholders; and ensuring effective communication and coordination between all parties.

2. Supports TranPlan 21 implementation using various tools and analysis techniques to determine the relative importance and value of contrasting transportation initiatives as they relate to performance and operation of the transportation system in Montana. Participates in limited and major updates of TranPlan2.1
3. Serves as a planning liaison for MDT with multiple agencies for transportation services. For example the incumbent might coordinate with Montana Department of Commerce's state and regional economic development personnel, Governor's Office of Economic Opportunity, and local governments to promote Montana's economic climate and ensure that MDT planning activities support local and state economic development plans. Reviews proposed highway projects to identify linkages to regional and statewide economic development plans and initiatives. Speaks on behalf of the agency in formal settings.
4. Provides expertise, guidance and assistance to local government planning agencies in the development and implementation of local comprehensive transportation plans. Prepares planning agreements defining scope of study, timeliness, and areas of responsibility for public and private entities. Develops, reviews and provides comments on products of the multimodal transportation planning process which include: requests for proposals, memorandums of agreement, consultant contracts, requests for qualifications, work programs, and transportation plans. Provides recommendations pertaining to the appropriate methods to use in developing transportation plans and programs.
5. Responds in writing or verbally to inquiries by local planning agencies, other agencies and interested members of the public in regards to federal and state laws pertaining to multimodal transportation planning. Develops and disseminates information on project status and technical planning procedures to keep local agencies informed.
6. Develops, coordinates and monitors complex contract funding agreements, memorandums of understanding and contracts with local governments to define roles, responsibilities and funding commitments for development of transportation plans, special transportation studies and research projects. Takes a lead role in negotiating contracts and agreements.
7. Researches and prepares responses to legislative requests. Provides guidance to lower level planners.

B. Research and Analysis and Modeling 40%

1. Develops methodologies and implements procedures to forecast future travel demands. This could include researching economic circumstances to establish baseline data for the development of transportation and economic forecasts. These modeling efforts are selected on the basis of available information, project time and costs. Modeling techniques will vary in complexity depending on the type of modeling required. Reports and recommendations will be developed by the incumbent for the bureau chief, division administrator and local government.
2. The incumbent researches, analyzes and applies new methodologies to implement comprehensive and complex planning studies. The results of this technical research are documented in technical and customized reports to be used by various government entities. Speak on behalf of the agency in formal settings.
3. The incumbent uses and designs area-wide computer traffic models and economic models to evaluate effectiveness of alternative transportation improvement projects. Requires incorporation of highly advanced technical software applications, such as HEAT, TransCAD, or REMI, which are designed to integrate planning and GIS data structures for facilitating the use of GIS technology and data in travel demand forecasting.
4. Critically reviews and evaluates MDT planning activities to ensure consistency with federal and state requirements. This involves researching and analyzing project specifications and outcomes, interpreting statutes and guidelines, and consulting with federal agency officials to

identify deficiencies and recommend viable solutions. The incumbent will provide guidance to lower level planners regarding modeling.

5. Oversees and manages databases, including the development, design, data acquisition and program documentation to be used by the multimodal planning staff and MDT staff.

C. Other Duties As Assigned 10%

Performs technical, administrative and other work as assigned by direct supervisor and/or Division Administrator.

The following duties and/or specific tasks listed under section II above are considered "essential functions" because they require specialized expertise and skill and are the primary reasons the job exists (they must be performed by this position with or without accommodations):

The following duties are considered essential functions because they require specialized expertise and skill and are the primary reasons the job exists:

Duty A: Research and Analysis and Modeling

Duty B: Transportation Planning Services

The following mental and physical demands are associated with these essential functions:

PHYSICAL

- Light lifting (less than 10 lbs.)
- Carry light items (papers, books, small parts)
- Remaining seated for extended periods of time, with occasional walking; standing; bending
- Occasional travel within the state and out of state travel by airline to national conferences and meetings.
- Operating a personal computer
- Communicate in writing, in person and over the phone

MENTAL

- Mediating conflicts between irate and often hostile parties.
- Ability to multi-task
- Demands for accuracy in all aspects of work
- Ability to meet inflexible deadlines
- Complex mathematics including statistical analysis
- Comparing data
- Compiling information, Analyzing, Coordinating, Negotiating, Instructing

Does this position supervise others? ☐ Yes ☒ No

SECTION III - Minimum Qualifications - List minimum requirements for the first day of work.

Critical knowledge and skills required for this position:

KNOWLEDGE: The position requires knowledge of the theories, principles, methods, and techniques of transportation planning, associated mathematical and statistical analysis, and computer sciences. This position requires knowledge of research methods, project management and data management techniques.

SKILLS:

Skill in written and verbal communication, research, analysis, public involvement strategies, and computer software applications used for data management and analysis, word processing, spreadsheets, publications, GIS/mapping and presentations.

Behaviors required to perform these duties:

See MDT Core Behaviors

Education:

Check the one box indicating minimum education requirements for this position for a new employee the first day of work:

- | | |
|---|--|
| <input type="checkbox"/> No education required | <input type="checkbox"/> Related AAS/2-years college/vocational training |
| <input type="checkbox"/> High school diploma or equivalent | <input checked="" type="checkbox"/> Related Bachelor's Degree |
| <input type="checkbox"/> 1-year related college/voc. training | <input type="checkbox"/> Related Master's degree |

Please specify the acceptable fields of study:

Preferred: BA/BS in Economics, Transportation Planning, Statistics, or Mathematics.

Acceptable: BA/BS in the following areas: Computer Science, Computer Information Systems, Project Management, Business, Public Administration, Finance, Accounting, Engineering, or Resource Management.

Experience:

Check the one box indicating minimum work-related experience requirements for this position for a new employee the first day of work:

- | | |
|---|---|
| <input type="checkbox"/> No prior experience required | <input checked="" type="checkbox"/> 3 years |
| <input type="checkbox"/> 1 year | <input type="checkbox"/> 4 years |
| <input type="checkbox"/> 2 years | <input type="checkbox"/> 5 or more years |

Alternative Qualifications:

This agency will accept alternative methods of obtaining necessary qualifications.

☒ Yes ☐ No

Alternative qualifications include:

Other combinations of education and related experience may be considered.

SECTION IV – Other Important Job Information

- | | |
|--|--|
| <input type="checkbox"/> Fingerprint check | <input checked="" type="checkbox"/> Valid driver's license |
| <input type="checkbox"/> Background check | <input type="checkbox"/> Other; Describe |

Other information including working conditions such as shifts in schedule, lifting requirements, travel or hours.

SECTION V – Signatures

Signature indicates this statement is accurate and complete.

Employee:

Name: _____ Title: _____

Signature: _____ Date: _____

Immediate Supervisor:

Name: _____ Title: _____

Signature: _____ Date: _____

Bureau Chief:

Name: _____ Title: _____

Signature: _____ Date: _____

Division/District Administrator:

Name: _____ Title: _____

Signature: _____ Date: _____

Department Designee:

Brent Rabe/Designee

Human Resources Officer
Human Resources Division

Signature: _____ Date: _____